

NLM should substantially increase the number of Medical Informatics training centers, individual awards for research training and career development, and demonstration grants.

3. Training in Health Information Management

The Challenge. There are not adequate numbers of persons in the biomedical fields who have had training in the use of modern computer and communications systems. There is a need both for biomedical professionals cross-trained in informatics and for persons from computer and information sciences and engineering who have had doctoral or post-doctoral training in the application of these technologies to health problems. Even the major university medical centers that have concentrated their resources on planning for institution-wide information services have found that locating and recruiting senior professionals with this kind of education and training is their greatest obstacle. Training in health information management skills is critical. Schools of the health professions must recognize the need for, and support a career path for, informatics-trained persons in their own institutional settings. NLM's role is to expand its successful (pre-doctoral and post-doctoral) grants program for career training in medical informatics. In addition, NLM needs to expand its support of demonstration grants, focusing on extramural research to improve access to biomedical information.

Recommended Action. *NLM should substantially increase the number of Medical Informatics training centers, individual awards for research training and career development, and demonstration grants at an incremental first-year cost of \$10 million.*

Following are the detailed actions that will accomplish this recommendation:

- A. Expand institutional support for young investigators through the First Independent Research in Support of Transition (FIRST) awards and Research Career Development Awards (RCDA) for more established investigators.

- B. Expand the number of competitive post-doctoral fellowship awards made directly to persons for use at universities of their choosing.
- C. Increase immediately the number of NLM training programs in medical informatics from eight to fifteen institutions, with a gradual increase to a total of twenty institutions receiving such support.
- D. Expand support for demonstration and research grants in medical informatics with particular emphasis on systems or methods to improve access to biomedical information. Seek ways to include minority health professionals in underserved communities.

Recommended Resources. The following table recommends appropriations needed to expand support for Training, Fellowships, and Demonstration Grants:

Incremental Dollars in Millions					
Training, Fellowships, and Demonstration Grants					
	FY 90	FY 91	FY 92	FY 93	FY 94
FIRST and RCDA awards	\$1.0	\$1.2	\$1.4	\$1.6	\$1.8
Post-doctoral fellowships	1.5	1.8	2.1	2.4	2.7
Training programs	2.5	3.0	3.5	4.0	4.5
Demonstration grants	5.0	6.0	7.0	8.0	9.0
Total	\$10.0	\$12.0	\$14.0	\$16.0	\$18.0
FTEs	1	1	1	1	1